

08321-110PC2 SEQLIST.txt

## SEQUENCE LISTING

&lt;110&gt; Thomas Jefferson University

<120> RECOMBINANT ANTIBODIES AND COMPOSITIONS  
AND METHODS FOR MAKING AND USING THE SAME

&lt;130&gt; 08321-110PC2

&lt;150&gt; US 10/461,148

&lt;151&gt; 2003-06-13

&lt;160&gt; 24

&lt;170&gt; FastSEQ for Windows Version 4.0

&lt;210&gt; 1

&lt;211&gt; 474

&lt;212&gt; PRT

&lt;213&gt; Human

&lt;400&gt; 1

```

Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1      5      10      15
Val Gln Cys Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
20      25      30
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35      40      45
Ser Asn Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50      55      60
Glu Trp Val Ser Ala Ile Ser Ala Ser Gly His Ser Thr Tyr Leu Ala
65      70      75      80
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
85      90      95
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
100      105      110
Tyr Tyr Cys Ala Lys Asp Arg Glu Val Thr Met Ile Val Val Leu Asn
115      120      125
Gly Gly Phe Asp Tyr Trp Gly Gln Gly Thr Arg Val Thr Val Ser Ser
130      135      140
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
145      150      155      160
Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
165      170      175
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
180      185      190
Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
195      200      205
Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
210      215      220
Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
225      230      235      240
Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
245      250      255
Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
260      265      270
Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
275      280      285
Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
290      295      300
Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
305      310      315      320
Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu

```

## 08321-110PC2 SEQLIST.txt

```

          325          330          335
His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
          340          345          350
Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
          355          360          365
Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
          370          375          380
Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
          385          390          395
Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
          400          405          410
Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
          415          420          425
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
          430          435          440
Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
          445          450          455
Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
          460          465          470

```

<210> 2  
 <211> 234  
 <212> PRT  
 <213> Human

```

<400> 2
Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1      5      10      15
Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser
20      25      30
Leu Ser Pro Gly Glu Arg Ala Thr Leu Ala Cys Arg Ala Ser Gln Thr
35      40      45
Ala Ser Arg Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
50      55      60
Arg Leu Leu Ile Tyr Asp Thr Ser Asn Arg Ala Thr Gly Ile Pro Ala
65      70      75      80
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Ser Ile Ser
85      90      95
Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Phe
100      105      110
Asn Trp Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Phe Lys Arg
115      120      125
Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
130      135      140
Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
145      150      155
Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
160      165      170
Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
175      180      185
Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
190      195      200
His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
205      210      215
Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
220      225      230

```

<210> 3  
 <211> 1557  
 <212> DNA  
 <213> Human

```

<400> 3
atggacacac tttgctccac gctcctgctg ctgaccatcc cttcatgggt cttgtcccaa 60
attaccttga aggagactgg tcctacgctg gtgaaacca cacagaccct cacgctgacc 120

```

## 08321-110PC2 SEQLIST.txt

```

tgcaccttct cgggggttctc actcagcact agtggagtgg gtgtgggctg gatccgtcag 180
ccccaggaa agggcctgga gtgggttaca ctcatatttatt gggatgatga taagcggtac 240
agtccatctc tggagaacag ggtcaccatc aggaaggaca cctccaaaaa ccaggtggct 300
cttacaatga cgaacatgga ccctttggac acaggcacat actactgtgc gcacagacaa 360
catatcagca gcttcccgtg gttcgattcc tggggccagg gaaccctggt caccgtctcc 420
tcagcttcca ccaagggccc atcgggtcttc cccctggcgc cctgctccag gagcacctct 480
gggggcacag cggccctggg ctgcctggtc aaggactact tccccgagcc ggtgacggtg 540
tcgtggaact caggcgccct gaccagcggc gtgcacacct tcccggctgt cctacagtcc 600
tcaggactct actccctcag cagcgtgggt accgtgccct ccagcagctt gggcaccag 660
acctacacct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gagagttgag 720
ctcaaaaccc cacttggtga cacaactcac acatgcccac ggtgcccaga gcccaaactct 780
tgtgacacac ctcccccggtg cccacgggtgc ccagagccca aatcttgtga cacacctccc 840
ccgtgcccac ggtgcccaga gcccaaactct tgtgacacac ctcccccatg cccacgggtgc 900
ccagcacctg aactcctggg aggaccgtca gtcttctctt tcccccaaa acccaaggat 960
acccttatga tttcccggac ccctgaggtc acgtgcgtgg tgggtggact gagccacgaa 1020
gaccccgagg tccagttcaa gtggtacgtg gacggcgtgg aggtgcataa tgccaagaca 1080
aagccgcggg aggagcagtt caacagcacg ttccgtgtgg tcagcgtcct caccgtctctg 1140
caccaggact ggctgaacgg taaggagtac aagtgaagg tctccaacaa agccctccca 1200
gccccatcg agaaaacccat ctccaaaacc aaaggacagc cccgagaacc acaggtgtac 1260
accctgcccc catcccggga ggagatgacc aagaaccagg tcagcctgac ctgcctgggtc 1320
aaaggcttct accccagcga catcgccgtg gagtgggaga gcagcgggca gccggagaa 1380
aactacaaca ccacgcctcc catgctggac tccgacggct ccttcttctc ctacagcaat 1440
ctcaccgtgg acaagagcag gtggcagcag gggaaacatct tctcatgctc cgtgatgac 1500
gaggctctgc acaaccgctt cagcgagaag agcctctccc tgtctccggg taaatga 1557

```

<210> 4  
 <211> 518  
 <212> PRT  
 <213> Human

<400> 4  
 Met Asp Thr Leu Cys Ser Thr Leu Leu Leu Thr Ile Pro Ser Trp  
 1 5 10 15  
 Val Leu Ser Gln Ile Thr Leu Lys Glu Thr Gly Pro Thr Leu Val Lys  
 20 25 30  
 Pro Thr Gln Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu  
 35 40 45  
 Ser Thr Ser Gly Val Gly Val Gly Trp Ile Arg Gln Pro Pro Gly Lys  
 50 55 60  
 Ala Leu Glu Trp Val Thr Leu Ile Tyr Trp Asp Asp Lys Arg Tyr  
 65 70 75 80  
 Ser Pro Ser Leu Glu Asn Arg Val Thr Ile Arg Lys Asp Thr Ser Lys  
 85 90 95  
 Asn Gln Val Ala Leu Thr Met Thr Asn Met Asp Pro Leu Asp Thr Gly  
 100 105 110  
 Thr Tyr Tyr Cys Ala His Arg Gln His Ile Ser Ser Phe Pro Trp Phe  
 115 120 125  
 Asp Ser Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr  
 130 135 140  
 Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser  
 145 150 155 160  
 Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu  
 165 170 175  
 Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His  
 180 185 190  
 Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser  
 195 200 205  
 Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Thr Cys  
 210 215 220  
 Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu  
 225 230 235 240  
 Leu Lys Thr Pro Leu Gly Asp Thr Thr His Thr Cys Pro Arg Cys Pro  
 245 250 255  
 Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro Glu  
 260 265 270  
 Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro Glu Pro  
 275 280 285

## 08321-110PC2 SEQLIST.txt

Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro Ala Pro Glu  
 290 295 300  
 Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Lys Pro Lys Asp  
 305 310 315 320  
 Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp  
 325 330 335  
 Val Ser His Glu Asp Pro Glu Val Gln Phe Lys Trp Tyr Val Asp Gly  
 340 345 350  
 Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn  
 355 360 365  
 Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp  
 370 375 380  
 Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro  
 385 390 395 400  
 Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu  
 405 410 415  
 Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn  
 420 425 430  
 Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile  
 435 440 445  
 Ala Val Glu Trp Glu Ser Ser Gly Gln Pro Glu Asn Asn Tyr Asn Thr  
 450 455 460  
 Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys  
 465 470 475 480  
 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Ile Phe Ser Cys  
 485 490 495  
 Ser Val Met His Glu Ala Leu His Asn Arg Phe Thr Gln Lys Ser Leu  
 500 505 510  
 Ser Leu Ser Pro Gly Lys  
 515

<210> 5  
 <211> 699  
 <212> DNA  
 <213> Human

<400> 5  
 atggcctgga cgttctcct cctcggcctc ctctctcact gcacaggggc tgtgacgtcc 60  
 tatgtgctga ctcagccacc ctcgggtgtca gtggccccag gaaagacggc caggattaac 120  
 tgtgggggaa acaacattga atatagaagt gtgcactggt accagcagaa gtcaggccag 180  
 gccctgttag cggatcatcta tgataatagt gaccggccct cagggatccc tgagcgattc 240  
 tctggttcca aatctgggaa cacggccacc ctgaccatca gcagggtcga agccggggat 300  
 gagggcggact attactgtca ggtgtgggat attagtagtg atgtgtgtctt cggcggaggg 360  
 accaagctga cgttcctagg tcagcccaag gctgccccct cggctcactct gttcccggcc 420  
 tcctctgagg agcttcaagc caacaaggcc acactgggtg gtctcataag tgacttctac 480  
 ccgggagccg tgacagtggc ctggaaggca gatagcagcc ccgtcaaggc gggagtggag 540  
 accaccacac cctccaaaca aagcaacaac aagtacgcgg ccagcagcta tctgagcctg 600  
 acgcctgagc agtgggaagtc ccacagaagc tacagctgcc aggtcacgca tgaagggagc 660  
 accgtggaga agacagtggc ccctacagaa tgttcatag 699

<210> 6  
 <211> 232  
 <212> PRT  
 <213> Human

<400> 6  
 Met Ala Trp Thr Val Leu Leu Leu Gly Leu Leu Ser His Cys Thr Gly  
 1 5 10 15  
 Ser Val Thr Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala  
 20 25 30  
 Pro Gly Lys Thr Ala Arg Ile Asn Cys Gly Gly Asn Asn Ile Glu Tyr  
 35 40 45  
 Arg Ser Val His Trp Tyr Gln Lys Ser Gly Gln Ala Pro Val Ala  
 50 55 60  
 Val Ile Tyr Asp Asn Ser Asp Arg Pro Ser Gly Ile Pro Glu Arg Phe  
 65 70 75 80

## 08321-110PC2 SEQLIST.txt

Ser Gly Ser Lys Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Val  
 85 90 95  
 Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp Asp Ile Ser  
 100 105 110  
 Ser Asp Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln  
 115 120 125  
 Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu  
 130 135 140  
 Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr  
 145 150 155 160  
 Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys  
 165 170 175  
 Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr  
 180 185 190  
 Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His  
 195 200 205  
 Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys  
 210 215 220  
 Thr Val Ala Pro Thr Glu Cys Ser  
 225 230

<210> 7  
 <211> 242  
 <212> PRT  
 <213> Human

<400> 7  
 Met Ser Val Pro Thr Met Ala Trp Ala Leu Leu Leu Leu Ser Leu Leu  
 1 5 10 15  
 Thr Gln Gly Thr Gly Ser Trp Ala Gln Ser Ala Leu Thr Gln Pro Arg  
 20 25 30  
 Ser Val Ser Gly Ser Pro Gly Gln Ser Val Thr Ile Ser Cys Thr Gly  
 35 40 45  
 Thr Ser Ser Asp Ile Gly Gly Tyr Asn Phe Val Ser Trp Tyr Gln Gln  
 50 55 60  
 His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Ala Thr Lys Arg  
 65 70 75 80  
 Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr  
 85 90 95  
 Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr  
 100 105 110  
 Tyr Cys Cys Ser Tyr Ala Gly Asp Tyr Thr Pro Gly Val Val Phe Gly  
 115 120 125  
 Gly Gly Thr Lys Leu Thr Val Leu Gly Gln Pro Lys Ala Ala Pro Ser  
 130 135 140  
 Val Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu Gln Ala Asn Lys Ala  
 145 150 155 160  
 Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro Gly Ala Val Thr Val  
 165 170 175  
 Ala Trp Lys Ala Asp Ser Ser Pro Val Lys Ala Gly Val Glu Thr Thr  
 180 185 190  
 Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr Ala Ala Ser Ser Tyr Leu  
 195 200 205  
 Ser Leu Thr Pro Glu Gln Trp Lys Ser His Arg Ser Tyr Ser Cys Gln  
 210 215 220  
 Val Thr His Glu Gly Ser Thr Val Glu Lys Thr Val Ala Pro Thr Glu  
 225 230 235 240  
 Cys Ser

<210> 8  
 <211> 1431  
 <212> DNA  
 <213> Human

## 08321-110PC2 SEQLIST.txt

```

<400> 8
atggactgga cctggagggt cctctttgtg gtggcagcag ctacaggtgt ccagtcccag 60
gtgcagctgg tgcagtctgg ggctgagggt aagaagcctg ggtcctcggg gaaggctctc 120
tgcaaggctt ctggaggcac cttcaacagg tatactgtca actgggtgcg acagggccct 180
ggacaagggc ttgagtggat gggaggcatc atccctatct ttggtacagc aaactacgca 240
cagaggttcc agggcagact caccattacc gcggacgaat ccacgagcac agcctacatg 300
gagctgagca gcctgagatc tgatgacacg gccgtgtatt tctgtgagag agagaatctc 360
gataattcgg ggacttatta ttatttctca ggctggttcg acccctgggg ccaggggaacc 420
ctggtcaccg tctcctcagc ctccaccaag ggcccatcgg tcttccccct ggacacctcc 480
tccaagagca cctctggggg cacagcggcc ctgggctgcc tgggtcaagga ctacttcccc 540
gaaccggtga cgggtgctgt gaactcaggc gccctgacca gcggcgtgca caccttcccc 600
gctgtcctac agtcctcagg actctactcc ctacagcagc tgggtgaccgt gccctccagc 660
agcttgggca cccagacctt catctgcaac gtgaatcaca agcccagcaa caccaagggtg 720
gacaagagag ttgagcccaa atcttgtgac aaaactcaca catgcccacc gtgcccagca 780
cctgaactcc tggggggacc gtcagtcttc ctcttcccc caaaacccaa ggacaccttc 840
atgatctccc ggacccctga ggtcacatgc gtgggtggtg acgtgagcca cgaagacctt 900
gaggtcaagt tcaactggta cgtggacggc gtggagggtg ataatgccaa gacaaagccg 960
cgggaggagc agtacaacag cacgtaccgt gtggtcagcg tcctcaccgt cctgcaccag 1020
gactggctga atggcaagga gtacaagtgc aagggtctcca acaaagccct cccagccccc 1080
atcgagaaaa ccattctcaa agccaaaggg cagccccgag aaccacaggt gtacacctg 1140
cccccatccc gggaggagat gaccaagaac caggtcagcc tgacctgcct ggtcaaaggc 1200
ttctatccca gcgacatcgc cgtggagtgg gagagcaatg ggcagccgga gaacaactac 1260
aagaccacgc ctcccgtgct ggactccgac ggctccttct tcctctatag caagctcacc 1320
gtggacaaga gcagggtggc gcagggggaa gctcttctcat gctccgtgat gcatgagggt 1380
ctgcacaacc actacacgca gaagagcctc tccctgtccc cgggtaaatg a 1431

```

```

<210> 9
<211> 476
<212> PRT
<213> Human

```

```

<400> 9
Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
1      5      10      15
Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
20      25      30
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe
35      40      45
Asn Arg Tyr Thr Val Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
50      55      60
Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala
65      70      75      80
Gln Arg Phe Gln Gly Arg Leu Thr Ile Thr Ala Asp Glu Ser Thr Ser
85      90      95
Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Asp Asp Thr Ala Val
100      105      110
Tyr Phe Cys Ala Arg Glu Asn Leu Asp Asn Ser Gly Thr Tyr Tyr Tyr
115      120      125
Phe Ser Gly Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val
130      135      140
Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser
145      150      155      160
Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys
165      170      175
Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu
180      185      190
Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu
195      200      205
Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Leu Gly Thr
210      215      220
Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val
225      230      235      240
Asp Lys Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro
245      250      255
Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
260      265      270
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val

```

## 08321-110PC2 SEQLIST.txt

```

      275      280      285
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
      290      295      300
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
305      310      315
Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
      325      330      335
Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Val
      340      345      350
Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
      355      360      365
Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
      370      375      380
Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
385      390      395
Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
      405      410      415
Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
      420      425      430
Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
      435      440      445
Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
      450      455      460
Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
465      470      475

```

<210> 10  
 <211> 705  
 <212> DNA  
 <213> Human

```

<400> 10
atggaagccc cagctcagct tctcttctct ctgctactct ggctcccaga taccaccgga 60
gaaatttgtg tgacacagtc tccagccacc ctgtctttgt ctccagggga aagagccacc 120
ctcgccctgca gggccagtca gactgctagc aggtacttag cctggtagca acagaaacct 180
ggccaggctc ccagactcct catctatgat acatccaaca gggccactgg catcccagcc 240
aggttcagtg gcagtggttc tgggacagac ttcactctct ccatcagcag cctggagcct 300
gaagattttg cagtttatta ctgtcagcag cgtttcaact ggccgtggac gttcggccaa 360
gggaccaagg tgggaattcaa acgaactgtg gctgcacat ctgtcttcac cttcccgcca 420
tctgatgagc agttgaaatc tggaactgcc tctgtttgtg gcctgctgaa taacttctat 480
cccagagagg ccaaagtaca gtggaaggtg gataacgccc tccaatcggg taactcccag 540
gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg 600
ctgagcaaa gacactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc 660
ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gttag 705

```

<210> 11  
 <211> 1425  
 <212> DNA  
 <213> Human

```

<400> 11
atggagtttg ggctgagctg gctttttctt gtggctattt taaaagggtg ccagtgtgag 60
gtgcagctgt tggagtctgg gggaggcttg gtacagcctg gggggtccct gagactctcc 120
tgtgcagcct ctggattcac ctttagcaac tatgccatga gctgggtccg ccaggctcca 180
gggaaggggc tggagtgggt ctcagctatt agtgctagtg gtcatagcac atatttggca 240
gactccgtga agggccggtt caccatctcc agagacaatt ccaagaacac gctgtatctg 300
caaatgaaca gcctgagagc cgaggacacg gccgtatatt actgtgcgaa agatcgagag 360
gttactatga tagttgtact tttgactact ggggccaggg aacccgggtc 420
accgtctcct ccgcctccac caagggccca tcggtcttcc ccctggcacc ctctccaag 480
agcacctctg ggggcacagc ggccctgggc tgcttggtca aggactactt ccccgaaaccg 540
gtgacgggtg cgtggaactc aggcgccttg accagcggcg tgcacacctt cccggctgtc 600
ctacagtcct caggactcta ctccctcagc agcgtggtga ccgtgccctc cagcagcttg 660
ggcaccaga cctacatctg caacgtgaat cacaagccca gcaacaccaa ggtggacaag 720
agagttgagc ccaaatcttg tgacaaaact cacacatgcc caccgtgccc agcacctgaa 780
ctcctggggg gaccgtcagt cttcctcttc ccccaaaac ccaaggacac cctcatgatc 840
tcccggacc ctgaggtcac atgcgtggtg gtggacgtga gccacgaaga ccctgaggtc 900

```

## 08321-110PC2 SEQLIST.txt

```

aagttcaact ggtacgtgga cggcgtggag gtgcataatg ccaagacaaa gccgcgggag 960
gagcagtaca acagcacgta ccgtgtgggtc agcgtcctca ccgtcctgca ccaggactgg 1020
ctgaatggca aggagtacaa gtgcaagggtc tccaacaaag ccctcccagc ccccatcgag 1080
aaaaccatct ccaaagccaa agggcagccc cgagaaccac aggtgtacac cctgccccca 1140
tcccgggagg agatgaccaa gaaccagggtc agcctgacct gcctgggtcaa aggccttctat 1200
cccagcgaca tcgccgtgga gtgggagagc aatgggcagc cggagaacaa ctacaagacc 1260
acgcctcccg tgctggactc cgacggctcc ttcttcctct atagcaagct caccgtggac 1320
aagagcaggt ggcagcaggg gaacgtcttc tcatgtctcg tgatgcatga ggctctgcac 1380
aaccactaca cgcagaagag cctctccctg tccccgggta aatga 1425

```

<210> 12  
 <211> 729  
 <212> DNA  
 <213> Human

```

<400> 12
atgagtgtcc ccaccatggc ctgggctctg ctctctctca gcctcctcac tcagggcaca 60
ggatcctggg ctcatgtctg cctgactcag cctcgctcag tgtccgggtc tcctggacag 120
tcagtcacca tctcctgcac tgggaaccag agtgatattg gtgggtataa ctttgtctcc 180
tggtagcaac aacacccagg caaagcccc aaactcatga tttatgatgc cactaagcgg 240
ccctcagggg tccctgatcg cttctctggc tccaagtctg gcaacacggc ctccctgacc 300
atctctgggc tccaggctga ggatgaggct gattattact gctgctcata tgcaggcgac 360
tacaccccg gcgtgggttt cggcggaggg accaagctga ccgtcctagg tcagcccaag 420
gctgccccct cggtcactct gttcccggc tcctctgagg agcttcaagc caacaaggcc 480
acactgggtg gtctcataag tgacttctac ccgggagccg tgacagtggc ctggaaggca 540
gatagcagcc ccgtcaaggc gggagtggag accaccacac cctccaaaca aagcaacaac 600
aagtacgcgg ccagcagcta cctgagcctg acgcctgagc agtggaagtc ccacagaagc 660
tacagctgcc aggtcacgca tgaaggagc accgtggaga agacagtggc ccctacagaa 720
tgttcatag

```

<210> 13  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primer

```

<400> 13
aaacgtacga tggagtttgg gctgagctgg ctt 33

```

<210> 14  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primer

```

<400> 14
aacgtacgat ggacacactt tgctccacgc tcct 34

```

<210> 15  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primer

```

<400> 15
aaacgtacga ccatggactg gacctggagg ttct 35

```

<210> 16  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence



## 08321-110PC2 SEQLIST.txt

<220>  
 <223> Primer  
  
 <400> 16  
 tgctaggggt gttagttttt ttcatgactc atttaccggg ggacagggga 49  
  
 <210> 17  
 <211> 56  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer, where n is a 5' end of light chain cDNAs  
  
 <221> misc\_feature  
 <222> (1)...(56)  
 <223> n = A,T,C or G  
  
 <400> 17  
 ggtaaatgag tcatgaaaaa aactaacacc cctagcnnnn nnnnnnnnnn nnnnnn 56  
  
 <210> 18  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer  
  
 <400> 18  
 aaagctagcc taacactctc ccctgttgaa gctc 34  
  
 <210> 19  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer  
  
 <400> 19  
 aaagctagcc tatgaacatt ctgtaggggc cactgt 36  
  
 <210> 20  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer  
  
 <400> 20  
 aaatctagac tatgaacatt ctgtaggggc cac 33  
  
 <210> 21  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer  
  
 <400> 21  
 cctctagatt acagtctggt ctcaccccc 29  
  
 <210> 22

## 08321-110PC2 SEQLIST.txt

<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 23  
cccgggttaa cagaagagtc aatcgatcag aac 33

<210> 23  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 23  
ttaagttaac caagaatagt ccaatga 27

<210> 24  
<211> 34  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 24  
tctcgagccc gggactatga agtgcctttt gtac 34